

Abstract

The present invention provides a method of charging a rechargeable device (108) and a charging apparatus wherein the rechargeable device (108) is connected to a 5 battery connection port (107) and ground (106), an external DC source having an input voltage (114) is connected to an input resistor (101) of a charging apparatus, a current reference value (109) and a voltage reference value (110) are fed to a control unit (104), a 10 duty cycle (d) is determined in accordance with the current reference value (109) and the voltage reference value (110) fed to the control unit (104), and, using the duty cycle (d), an output voltage (402, 403) applied to the rechargeable device (108) is switched between a 15 minimum output voltage (404) and a maximum output voltage (405) dependent on the current reference value (109) and the voltage reference value (110) by means of a charging switch (103).

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Figure 1